Directed. VIDEO OWNER'S GUIDE INSTALLATION GUIDE



Overhead Video Console

MODEL OHC100

Table of Contents

Warranty
Safety Information
Important Safequards
When Cleaning the Vehicle
While Driving
When Parked
Proper Use
Temperature
Repairs
Important Information
. FCC Notice
Your Warranty
Features
Features
Accessories
Basic Operation
Monitor Operation
HP 050 Wireless Headphones
Dome Light Operation
Installation
Tools and Materials Needed
Installation Procedure
Wiring Guide

Limited Three-Year Warranty

For a period of THREE YEARS from the date of purchase, Directed Electronics, Inc. ("DIRECTED") promises to the original purchaser to repair or replace, free of cost, with a comparable reconditioned model any **OVERHEAD CONSOLE** (hereafter the "UNIT"), which proves to be defective in workmanship or material defect under normal and reasonable use during the first 3 years after the purchase and installation of the unit provided the following conditions are met: the unit was purchased and installed by an authorized DIRECTED dealer; the unit remains in the vehicle in which the unit was originally installed; and the unit is returned to DIRECTED. The unit in question must be returned to DIRECTED postage paid and must be accompanied by a clear, legible copy of the bill of sale bearing the following information:

- Date of Purchase
- Your Full name and address
- Authorized dealer's company name and address
- Type of unit installed
- Year, make and model of the automobile
- Automobile license number
- Vehicle Identification number
- Installation receipts

All components and accessories other that the unit, including without limitation the remote control, cables and installation accessories carry a 60-day warranty from the date of purchase of the same.

This warranty is automatically void if the unit is bought from anyone other than an authorized dealer, the unit's date code or serial number is defaced, missing or altered; the unit has been modified or used in a manner contrary to its intended purpose; or the unit has been damaged by accident, unreasonable use, neglect, improper service, installation or other causes not arising out of defects in workmanship, materials or construction. This warranty is nontransferable and does not cover batteries. This warranty <u>does not cover labor costs</u> for the removal, diagnosis, troubleshooting or reinstallation of the unit. For service on an out-of-warranty product a flat fate fee by model is charged. Contact your authorized dealer to obtain the service charge for your unit.

TO THE MAXIMUM EXTENT ALLOWED BY LAW, ALL WAR-RANTIES. INCLUDING BUT NOT LIMITED TO EXPRESS WAR-RANTY, IMPLIED WARRANTY, WARRANTY OF MER-CHANTABILITY, FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF NON-INFRINGEMENT OF INTELLECTUAL PROPERTY, ARE EXPRESSLY EXCLUDED; AND DIRECTED NEITHER ASSUMES NOR AUTHORIZES ANY PERSON OR ENTITY TO ASSUME FOR IT ANY DUTY. OBLIGATION OR LIABILITY IN CONNECTION WITH ITS PRODUCTS. DIRECT-ED DISCLAIMS AND HAS ABSOLUTELY NO LIABILITY FOR ANY AND ALL ACTS OF THIRD PARTIES INCLUDING DEAL-ERS OR INSTALLERS. IN THE EVENT OF A CLAIM OR A DIS-PUTE INVOLVING DIRECTED OR ITS SUBSIDIARY, THE PROPER VENUE SHALL BE SAN DIEGO COUNTY IN THE STATE OF CALIFORNIA. CALIFORNIA STATE LAWS AND APPLICABLE FEDERAL LAWS SHALL APPLY AND GOVERN THE DISPUTE. THE MAXIMUM RECOVERY UNDER ANY CLAIM AGAINST DIRECTED SHALL BE STRICTLY LIMITED TO THE AUTHORIZED DIRECTED DEALER'S PURCHASE PRICE OF THE UNIT. DIRECTED SHALL NOT BE RESPONSI-BLE FOR ANY DAMAGES WHATSOEVER, INCLUDING BUT NOT LIMITED TO, ANY CONSEQUENTIAL DAMAGES, INCI-DENTAL DAMAGES, DAMAGES FOR THE LOSS OF TIME, LOSS OF EARNINGS, COMMERCIAL LOSS, LOSS OF ECO-NOMIC OPPORTUNITY AND THE LIKE. NOTWITHSTANDING THE ABOVE. THE MANUFACTURER DOES OFFER A LIMITED WARRANTY TO REPLACE OR REPAIR THE CONTROL MOD-ULE AS DESCRIBED ABOVE. Some states do not allow limitations on how long an implied warranty will last or the exclusion or limitation of incidental or consequential damages. This warranty gives you specific legal rights and you may also have other rights that vary from State to State. DIRECTED does not and has not authorized any person or entity to create for it any other obligation, promise, duty or obligation in connection with this UNIT.

Safety Information

WARNING:

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE. TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK AND ANNOYING INTERFERENCE, USE ONLY THE INCLUDED HARDWARE.

DIRECTED ELECTRONICS, INC. DISCLAIMS ANY LIABILITY FOR ANY BODILY INJURY, INCLUDING FATALITIES, OR PROPERTY DAMAGE THAT MAY RESULT FROM ANY IMPROPER OR UNINTENDED USES OF THIS PRODUCT.

PLEASE READ THIS MANUAL IN ITS ENTIRETY BEFORE BEGINNING THE INSTALLATION.

The OHC100 overhead console is not designed for viewing by the vehicle operator and should not be installed where the driver can view it while driving.

This system is designed and intended for installation by MECP (certified professional) installers. Tools, equipment and product instal-

Important Safeguards

WHEN CLEANING THE VEHICLE

Do not spray this unit with water or cleaning solutions. Moisture and the chemicals found in cleaning fluids could damage the consoles finish and interior electronics.

WHILE DRIVING

This unit is intended for use in the rear seat area only. It should not be installed in a location that would allow the driver to view it while driving.

WHEN PARKED

The screen is easily removable. Always remove or close the screen when parking for an extended period of time to avoid potential theft or exposure to direct sunlight.

© 2002 Directed Electronics, Inc.

PROPER USE

have this system installed.

Do not touch the screen unless cleaning with a soft dry cloth. Do not pull or hang from the monitor mount.

lation techniques common to the Mobile

Electronics industry are required, therefore it is not recommended that the consumer tries to

install this system. Installations or modifica-

tions by anyone other than authorized Directed

retailers may limit or void the product warranty.

Please consult with your authorized retailer to

TEMPERATURE

LCD monitors are susceptible to extremes in temperature. If the vehicle interior is extremely hot or cold the monitor should not be operated until a comfortable vehicle interior temperature has been reached.

REPAIRS

If the OHC100 stops working for any reason, discontinue use immediately and consult with your retailer about any necessary repairs.

Important Information

FCC NOTICE

This device complies with Part 15 of FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this device.

YOUR WARRANTY

Your warranty registration must be completely filled out and returned within 10 days of purchase. Your product warranty will not be validated if your warranty registration is not returned. Make sure you receive the warranty registration from your dealer. It is also necessary to keep your proof of purchase, which reflects that the product was installed by an authorized dealer.

Features

FEATURES

- Choice of three monitor sizes.
- Monitors can be changed at any time without the need for tools.
- Built-in Infrared transmitter and two pairs of wireless headphones.
- On-screen display and wireless remote control input to allow full control of all Audio/Video system sources.
- Removable monitor for added security.
- Built-in dome light for interior lighting.
- Adjustable viewing angle.
- Universal mounting trim ring.
- Cut-to-length mounting post.

ACCESSORIES

Video Console with IR TX and Dome Light.

- IR Wireless Headphone x 2.
- Trim Ring x 1 Universal.
- Mini Trim Ring/Adapter x 1.
- Plastic Mounting Posts x 4.
- Metal Mounting Plate x 1.
- Machine Screws x 4.
- Sheet Metal Screws x 4.
- 2.6 mm Tape Screws x 11.
- NOTE: This manual makes reference to optional Directed Video parts not included with this product.

Basic Operation

MONITOR OPERATION

OPEN/CLOSE THE MONITOR DOOR

- To Open Press the monitor door release button (7); the monitor door will lower into the viewing position.
- To Close Place your hand on the bottom center of the monitor door (3) and push it upward into the video console until a click is heard.

INSTALLING THE MONITOR

- Open the monitor door to the viewing position.
- Hold the monitor with the top tilted away from the monitor door, and then place the bottom of the monitor into the two mounting hooks at the bottom of th monitor door.
- Push the top of the monitor toward the monitor door until a distinctive click is heard. the wiring connector at the rear of the monitor is self guiding and will automatically complete the connection.

REMOVING THE MONITOR

With the monitor door in the viewing position, press the monitor release button (1). At the same time, gently tilt the top of the monitor away from the monitor door then lift the monitor up and out of the mounting hooks.

ADJUSTING THE VIEWING ANGLE

The viewing angle can be adjusted by sliding the view angle adjuster from side to side.

Open the monitor door to its current viewing angle.

© 2002 Directed Electronics, Inc.

- Pull the bottom of the monitor door toward the rear of the car and slide the view angle adjuster all the way to the left, then release the monitor door. The monitor should now be at its maximum view angle.
- Pull on the monitor door until it reaches the desired view angle and hold it.
- While still holding the monitor door, slide the view angle adjuster to the right until it stops. This will set the monitor door at the desired view angle.

HP050 WIRELESS HEADPHONES

OPERATION

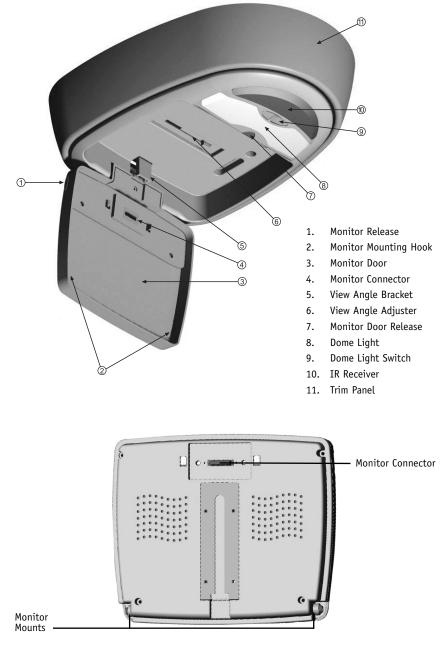
- The headphones automatically turn on when placed on your head.
- Adjust the volume to the desired level using the volume dial.
- The headphones must be in line of sight of the IR lens (10) on the OHC100 to receive an audio signal.

BATTERY REPLACEMENT

Remove the slide door on the inside of the headphones to access the batteries. Replace with standard AAA batteries making sure the batteries are inserted according to the polarity marked on inside of the headphone case.

DOME LIGHT OPERATION

If the OHC100 has a built-in dome light (8) that can be used if the factory dome light must be removed to accommodate the installation. The built-in dome light has a three-position switch (9) - OFF, DOOR, and ON.



Installation

TOOLS AND MATERIALS NEEDED

- Screwdriver
- Power drill with drill bits and screw tip
- Awl or scribe
- Razor knife
- Digital Multi-meter
- Marker
- Tape Measure
- Masking Tape
- Fabric Cleaner
- Wire

INSTALLATION PROCEDURE

MOUNTING LOCATION

- Discuss with the vehicle owner a location in the vehicle that will allow viewing from the rear passenger seats but not be visible to the driver. The best location is usually slightly to the rear of the front seats in the area of the dome light.
- Ensure that the chosen mounting location will not hinder vehicle operation or the driver's view to the rear of the vehicle.
- Access the rear of the headliner (remove the dome light assembly if necessary) to locate any obstructions. At this time check for and move any hidden wires, brackets, hoses or vehicle electronic components above the headliner that could be damaged during installation.
- NOTE: At this time, locate any roof support brackets that can be used for supporting the mounting bracket.
- 4. The headliner area chosen for mounting should be the flattest possible to reduce

© 2002 Directed Electronics, Inc.

the amount of cutting required to fit the trim panel to the contour of the headliner.

 After choosing the optimum location, hold the trim panel up to the headliner to approximate the final mounting location, mark the headliner at the center point of the trim panel from the front to the rear of the vehicle.

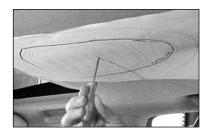


6. Measure from either side of the vehicle to the previously marked center point to find the center point from left to right of the vehicle and mark it. This will be the point at which the cutout template will be positioned for cutting the headliner. Make sure it is in a location that will allow the four mounting posts to solidly attach to the vehicle roof.



CUTTING THE HEADLINER

 Insert a pick tool or pin through the cutout templates center point indicator and the center point mark on the headliner to align the cutout template with the center of the vehicle.



- Sight down the center of the vehicle from the rear and align the template so it runs square to the vehicle and other interior components.
- Make sure the arrows point toward the front of the vehicle. Attach the template to the headliner using masking tape.
- 4. Using both hands for control, cut the headliner with a razor or sharp knife, being careful not to slip. DO NOT cut past the heavy line marked CUT LINE. It is the maximum cut size when using the trim ring for installation. The only time the headliner should be cut past this line is when the monitor mount is being installed directly to the headliner without the use of the trim ring.

NOTE: For extra support it is suggested that the minimum amount of the headliner be removed.

INSTALL THE MOUNTING PLATE

- After removing the headliner cutout, thoroughly clean the inside sheet metal of the vehicle roof with a degreaser so no dust or residue remains. This will allow the mounting posts to securely adhere to the vehicle roof. Extremes in temperature can diminish the life of some adhesives allowing the overhead monitor to vibrate or come loose.
- NOTE: When installing the mounting plate it is always advisable to use any available metal roof supports in conjunction with the mounting posts.
- Place the mounting plate against the vehicle roof or headliner and mark the location of the slotted holes that will give the most support. As with the template, make sure the position of the mounting bracket is square to the vehicle and interior components.
- 3. Using these marks as a guide, remove the double-stick tape from the mounting posts and apply to the vehicle roof. Position the mounting posts at the approximate center of the slotted holes. This will allow for maximum adjustability during the final mounting of the OHC100. After adhering the mounting posts to the vehicle roof it is recommended that a generous bead of silicone be applied to their base at the point of contact with the roof.



NOTE: Take care not to dimple the vehicle exterior or puncture the roof sheet metal when tightening screws.



© 2002 Directed Electronics, Inc.

4. Install the mounting bracket.

ROUTING THE CABLES AND WIRES

- Remove the negative terminal from the battery or remove the fuses for any circuits necessary for this installation before proceeding.
- 2. Remove any body panels or brackets necessary for routing the wires and cables.
- It is important to run the wires in such a way that they cannot be damaged or chafe against sharp metal during reassembly.
- All wires should be loomed and properly fused at the source. Be sure to leave enough length in the wires and cables to reach the OHC100 connectors during mounting.
- Extend the dome light wires if necessary to a length adequate for connecting to the OHC100's dome light wires.
- NOTE: Information about wiring connections can be found in the Wiring Guide section of this manual.

MOUNTING THE OHC100

- 1. Cut the trim ring to match the contour of the headliner.
- 2. Attach the video console to the trim panel using the 11--2.6 mm tape screws.
- 3. Check that the depths of the mounting posts are adequate by holding the fully assembled OHC100 up to the roof. It should be spaced so that the headliner will not distort when the OHC100 is tightly screwed to the mounting bracket.
- 4. If adjustment is necessary, the mounting posts can be cut to length.
- 5. Connect all wires and cables. Refer to *Wiring Guide* section of this manual.
- Attach the OHC100 assembly to the mounting bracket using the four machine screws.



- The trim panel should be flush to the headliner without gaps. If any gaps occur, adjust the length of the spacers and/or cut the trim panel to the correct shape.
- 8. Install the monitor into the detachable mounting bracket and fold into the closed position. Open and close the unit to test the operation.

VEHICLE-SPECIFIC AFTERMARKET INSTALLATION

The mini trim ring adapter has a raised adapter portion designed to adapt the OHC100 to fit into any aftermarket vehicle-specific overhead console.

- Follow the Installation Procedures (Mounting Location, Cutting the Headliner, and Routing Cables and Wires) section outlined in this guide.
- Install the aftermarket vehicle-specific overhead console following the instructions included with the console.
- If depth is an issue, attach the mini trim ring adapter to the overhead console (screws not provided).
- 4. Connect the cables and wires as described in the *Wiring Guide* section of this guide.
- 5. Attach the OHC100 assembly to the overhead console using the four machine screws provided.

NOTE: Take care not to dimple the vehicle exterior or puncture the roof sheet metal when tightening the screws.

The included mini trim ring adapter is for installing the OHC100 to a flat headliner surface that needs minimum space. It is also designed to adapt the OHC100 to fit into vehicle-specific overhead consoles available through aftermarket mobile video distributors.

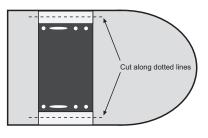
When using the OHC100 with an aftermarket overhead console with inadequate mounting depth, the 1" Mini trim ring adapter can be modified by cutting out the mounting bracket portion of the spacer and using it as a universal 1" mini trim ring adapter. this gives the installer an additional depth of 1".



HEADLINER INSTALLATIONS

Remove the adapter portion of the mini trim ring where indicated by the dotted line in the diagram below.

- 1. Install the mounting posts.
- 2. Screw in the supplied metal plate to the mounting posts.
- 3. Attach the 1" mini trim ring adapter to the overhead console.
- 4. The OHC100 can now be installed following the *Installation Procedure* of this guide.

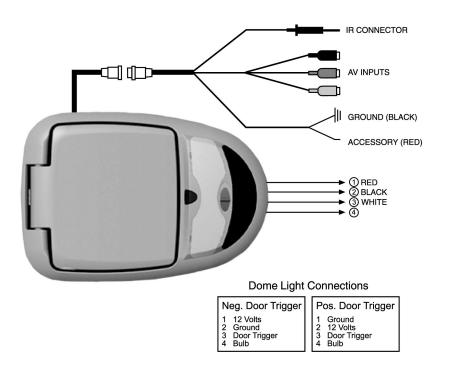




AFTER THE INSTALLATION

- After completion of the video source installation, reconnect the battery or replace any fuses that were removed prior to installation.
- 2. Test the operation of the monitor door, dome lights, and remote control operation of the video source.
- 3. Remove any marks or dirt remaining on vehicle interior using a quality fabric cleaner and return the vehicle to the customer.

Wiring Guide



- Accessory The RED wire should be connected to a fused (+) 12 volt wire that turns on/off with the key.
- Ground The BLACK wire should be connected to a chassis ground, preferably scrap sheet metal.
- AV Input Connect to MCB1000 or AV source.
- IR Connector Connect to MCB1000 or AV source
- NOTE: When using the MCB1000 with the OHC100, to only use the DIN to DIN cable supplied with the MCB1000, not the DIN to RCA cable. The DIN to RCA is only for use without the MCB1000.

The company behind this system is Directed Electronics, Inc.

Since its inception, Directed has had one purpose, to provide consumers with the finest vehicle security, car stereo products, rear seat entertainment, and accessories available. The recipient of more than 20 patents in the field of advanced electronic technology, Directed is ISO 9001 registered.

Quality Directed Electronics products are sold and serviced throughout North America and around the world.

Call (800) 274-0200 for more information about our products and services.



DEI is an ISO 9001 registered company

Directed[®] is committed to delivering world-class quality products and services that excite and delight our customers.



Directed Electronics, Inc. Vista, CA 92083 www.directed.com ©2002 Directed Electronics, Inc. - All rights reserved N87101 7-02